



#19/D

## SEQUENCE LISTING

## (1) GENERAL INFORMATION:

- (i) APPLICANT: Ravnikar et al.
- (ii) TITLE OF INVENTION: Thioredoxin/Heterologous Protein Bacterial Expression System
- (iii) NUMBER OF SEQUENCES: 14
- (iv) CORRESPONDENCE ADDRESS:
  - (A) ADDRESSEE: Schering-Plough Corporation
  - (B) STREET: 2000 Galloping Hill Road
  - (C) CITY: Kenilworth
  - (D) STATE: New Jersey
  - (E) COUNTRY: U.S.A.
  - (F) ZIP : 07033-0530
- (v) COMPUTER READABLE FORM:
  - (A) MEDIUM TYPE: diskette
  - (B) COMPUTER: Power Macintosh 7600/120
  - (C) OPERATING SYSTEM: Macintosh 7.5.3
  - (D) SOFTWARE: Microsoft Word 6.0
- (vi) CURRENT APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 08/846,606
  - (B) FILING DATE: 30-APR-1997
- (vii) PRIOR APPLICATION DATA:
  - (A) APPLICATION NUMBER: US 60/011,606
  - (B) FILING DATE: 30-APR-1996
- (viii) ATTORNEY/AGENT INFORMATION:
  - (A) NAME: Thampoe, Immac J.
  - (B) REGISTRATION NUMBER: 36,322
  - (C) REFERENCE DOCKET NUMBER: JB0600Q

## (2) INFORMATION FOR SEQ ID NO:1

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 30 bases
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1

CCTGTGGAGT TACATATGAG CGATAAAATT 30

## (2) INFORMATION FOR SEQ ID NO:2

- (i) SEQUENCE CHARACTERISTICS:
  - (A) LENGTH: 47 bases
  - (B) TYPE: nucleic acid
  - (C) STRANDEDNESS: single
  - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:2

GCACCCAACA TGCAAGGATC CTTACGCCAG ATTAGCATCG AGGAACCT 47

## (2) INFORMATION FOR SEQ ID NO:3

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3

ATGAGCGATA	AAATTATTCA	CCTGACTGAC	GACAGTTTG	ACACGGATGT	50
ACTCAAAGCG	GACGGGGCGA	TCCTCGTCGA	TTTCTGGCA	GAGTGGTGCG	100
GTCCGTGCAA	AATGATCGCC	CCGATTCTGG	ATGAAATCGC	TGACGAATAT	150
CAGGGCAAAC	TGACCGTTGC	AAAACTGAAC	ATCGATCAA	ACCCTGGCAC	200
TGCGCCGAAA	TATGGCATCC	GTGGTATCCC	GACTCTGCTG	CTGTTCAAAA	250
ACGGTGAAGT	GGCGGCAACC	AAAGTGGGTG	CACTGTCTAA	AGGTCAGTTG	300
AAAGAGTTCC	TCGATGCTAA	TCTGGCGTAA	GGATCC		336

## (2) INFORMATION FOR SEQ ID NO:4

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 336 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4

ATGAGCGATA	AAATTATTCA	CCTGACTGAC	GACAGTTTG	ACACGGATGT	50
ACTCAAAGCG	GACGGGGCGA	TCCTCGTCGA	TTTCTGGCA	GAGTGGTGCG	100
GTCCGTGCAA	AATGATCGCC	CCGATTCTGG	ATGAAATCGC	TGACGAATAT	150
CAGGGCAAAC	TGACCGTTGC	AAAACTGAAC	ATCGATCAA	ACCCTGGCAC	200
TGCGCCGAAA	TATGGCATCC	GTGGTATCCC	GACTCTGCTG	CTGTTCAAAA	250
ACGGTGAAGT	GGCGGCAACC	AAAGTGGGTG	CACTGTCTAA	AGGTCAGTTG	300
AAAGAGTTCC	TCGAGGCTAA	TCTGGCGTAA	GGATCC		336

## (2) INFORMATION FOR SEQ ID NO:5

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 81 bases pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5

GATAATATTC	TGGCTGGTTC	TGGTTCTGGT	GATGACGATG	ACAAGGGTCC	50
TGTTCCGCCG	TCTACCGCTC	TGCGTGAGCT	C		81

## (2) INFORMATION FOR SEQ ID NO:6

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 27 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6

Asp Asn Asn Leu Ala Gly Ser Gly Ser Gly Asp Asp Asp Asp Lys  
1                   5                   10                   15

Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu  
20                   25

## (2) INFORMATION FOR SEQ ID NO:7

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 52 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7

GAAGGAGGCT GATTAAATGG GTCCGGTTCC GCCGTCTACC GCTCTGGAGC 50  
TC   52

## (2) INFORMATION FOR SEQ ID NO:8

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 18 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8

AAGGAGGCTG ATTAATG 18

## (2) INFORMATION FOR SEQ ID NO:9

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 17 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9

AAGGAGGCTG ATTAATG 17

## (2) INFORMATION FOR SEQ ID NO:10

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 14 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10

AAGGAGGTTC AATG 14

## (2) INFORMATION FOR SEQ ID NO:11

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11

Leu Asp Ala Asn Leu Ala  
1 5

## (2) INFORMATION FOR SEQ ID NO:12

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12

CTCGATGCTA ATCTGGCGTA A 21

## (2) INFORMATION FOR SEQ ID NO:13

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 21 bases
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13

CTCGAGGCTA ATCTGGCGTA A 21

## (2) INFORMATION FOR SEQ ID NO:14

## (i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: peptide

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14

Leu Glu Ala Asn Leu Ala  
1 5